

THE CLAIMS

- 1 1. (currently amended) A method of making a golf ball, comprising:
2 providing a pre-formed golf ball subassembly;
3 mixing a first material and a second material in a mixer to form a cover layer material;
4 and
5 cooling said mixer;
6 wherein said cooling includes using a liquid to cool said mixer;
7 cooling said pre-formed golf ball subassembly such that said golf ball subassembly
8 undergoes a volumetric reduction; and
9 applying a cover layer of said cover layer material over said volumetrically reduced golf
10 ball subassembly to form a covered golf ball subassembly.
- 1 2. (original) The method of claim 1, wherein said mixing includes mixing said first material
2 and said second material to form a cover layer material including at least 0.05% catalyst.
- 1 3. (original) The method of claim 2, wherein said mixing includes mixing said first material
2 and said second material to form a cover layer material including at least 0.1% catalyst.
- 1 4. (original) The method of claim 1, wherein said mixing includes mixing said first material
2 and said second material to form a cover layer material having a gel time with a duration of less
3 than about 60 seconds.
- 1 5. (original) The method of claim 1, wherein said mixing includes mixing said first material
2 and said second material to form a thermoset polyurethane cover layer material.
- 1 6. (canceled)

1 7. (currently amended) The method of claim ~~[[6]]~~ 1, wherein said applying includes casting
2 said cover layer.

1 8. (currently amended) The method of claim ~~[[6]]~~ 1, wherein said applying includes
2 injection molding said cover layer.

1 9. (currently amended) The method of claim ~~[[6]]~~ 1, further comprising:
2 heating said covered golf ball subassembly to a first temperature; and
3 holding said covered golf ball subassembly at said first temperature for a first time
4 duration.

1 10. (original) The method of claim 9, further comprising:
2 heating said covered golf ball subassembly to a second temperature; and
3 holding said covered golf ball subassembly at said second temperature for a second time
4 duration.

1 11. (currently amended) A method of making a golf ball, comprising:
2 mixing a first material and a second material in a mixer to form a thermoset polyurethane
3 cover layer material; ~~and~~
4 applying a cover layer of said cover layer material over a golf ball subassembly; and
5 cooling said mixer to maintain the material therein at a temperature of less than about
6 130° F.

1 12. (canceled)

1 13. (currently amended) The method of claim ~~12~~ 11, wherein said cooling said mixer
2 includes cooling said mixer using a liquid.

1 14. (original) The method of claim 11, further comprising:
2 cooling said golf ball subassembly such that said golf ball subassembly undergoes a
3 volumetric reduction; and
4 wherein said applying said cover layer includes applying said cover layer of said cover
5 layer material over said volumetrically reduced golf ball subassembly.

1 15. (original) The method of claim 14, further comprising:
2 cooling said mixer.

1 16. (original) The method of claim 15, wherein said cooling said mixer includes cooling said
2 mixer using a liquid.

1 17. (currently amended) A method of making a golf ball, comprising:
2 providing a pre-formed golf ball subassembly;
3 cooling [[a]] said golf ball subassembly such that the golf ball subassembly undergoes a
4 volumetric reduction;
5 mixing a first material and a second material in a mixer to form a cover layer material;
6 cooling said mixer;
7 applying a cover layer of said cover layer material over the volumetrically reduced golf
8 ball subassembly to form a covered golf ball subassembly; and
9 curing said covered golf ball subassembly.

1 18. (original) The method of claim 17, wherein said cooling said mixer includes cooling said
2 mixer with a liquid.

1 19. (original) The method of claim 17, wherein said curing includes:
2 heating said covered golf ball subassembly to a first temperature; and
3 holding said covered golf ball subassembly at said first temperature for a first time
4 duration.

1 20. (original) The method of claim 19, wherein said heating said covered golf ball
2 subassembly to a first temperature includes heating said covered golf ball subassembly to a
3 temperature between about ambient and about 255°F.

1 21. (original) The method of claim 20, wherein said holding said covered golf ball
2 subassembly at said first temperature includes holding said covered golf ball subassembly at said
3 first temperature for a time duration between about 6 minutes and about 12 minutes.

1 22. (currently amended) The method of claim 19, wherein said curing further includes:
2 ~~heating~~ cooling said covered golf ball subassembly to a second temperature less than said
3 first temperature; and
4 holding said covered golf ball subassembly at said second temperature for a second time
5 duration.

1 23. (canceled)

1 24. (currently amended) The method of claim ~~23~~ 22, wherein said holding said covered golf
2 ball subassembly at said second temperature includes holding said covered golf ball subassembly
3 at said second temperature for about 20 minutes.

1 25. (original) A method of making a golf ball, comprising:
2 forming a golf ball subassembly;
3 mixing a first material and a second material in a mixer to form a cover layer material;
4 cooling said mixer to maintain the first and second materials at a temperature of less than
5 about 130 F;
6 providing a mold;
7 applying a cover layer of said cover layer material on said golf ball subassembly using
8 said mold to form a covered golf ball subassembly; and
9 curing said covered golf ball subassembly.

1 26. (original) The method of claim 25, wherein:
2 said providing includes providing a first mold and a second mold; and
3 said applying includes:
4 inserting a predetermined amount of said cover layer material into said first mold;
5 inserting said golf ball subassembly into said first mold;
6 inserting a predetermined amount of said cover layer material into said second mold; and
7 coupling said first and said second molds together.

1 27. (original) The method of claim 26, further comprising:
2 heating said first mold and said second mold prior to said applying.

1 28. (original) The method of claim 25, wherein said applying includes:
2 inserting said golf ball subassembly into said mold; and
3 inserting a predetermined amount of said cover layer material into said mold.

- 1 29. (original) The method of claim 25, further comprising:
2 cooling said golf ball subassembly such that the golf ball subassembly undergoes a
3 volumetric reduction prior to said applying.
- 1 30. (original) The method of claim 25, further comprising:
2 forming an intermediate layer on said golf ball subassembly prior to said applying.
- 1 31. (original) The method of claim 25, further comprising:
2 heating said mold prior to said applying.
- 1 32. (original) The method of claim 31, wherein said heating includes heating said mold to a
2 temperature of between about 105°F and about 145°F.
- 1 33-41. (canceled)